

Date: Thu, 9 Jun 94 04:30:15 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
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Subject: Ham-Ant Digest V94 #175
To: Ham-Ant

Ham-Ant Digest Thu, 9 Jun 94 Volume 94 : Issue 175

Today's Topics:

146/440 HT ant
Balloon
GAP Titan vs MFJ-1798 vs R-7 (?)
Newbie ponders J-Poles...
Why high SWR on 30 meter GP?

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 8 Jun 1994 18:59:13 GMT
From: ihnp4.ucsd.edu!swrinde!elroy.jpl.nasa.gov!wp-sp.nba.trw.com!
gatekeeper.esl.com!m42026.esl.com!user@network.ucsd.edu
Subject: 146/440 HT ant
To: ham-ant@ucsd.edu

In article <9406061010.aa21289@blkbox.COM>, w5robert@blkbox.COM (Robert
Wood) wrote:

> Anyone know of an antenna being sold that is better
> on a dual band HT than the standard "duckie" I've seen the
> two meter whips for HT, but haven't found a dual band version.
>
> Thanks, Robert WB5CRG w5robert@blkbox.com

--
I use a MALDOL brand 2M/70cm/23cm myself and the "S" level readings on my
local repeaters with this antenna can be 1 or 2 levels higher, compared to

stock/shorter rubber duck antennas. I don't recall the part no. I suspect the performance of my antenna is similar to the 2M/70cm dual band versions.

I'm surprised no one has responded sooner, but perhaps it's because the question seems so obvious. Both COMET and DIAMOND also have longer, higher gain rubber duck antennas.

You might try the COMET CH-72S or the DIAMOND RH77B. Also, ANLI and MALDOL have 2M/70cm BNC antennas which should provide higher gain over the antenna which came with your HT.

The usage of the word "better" may have thrown some readers. While these antennas may provide some increase in performance, they are longer, which may be annoying.

Other Hams have decided to use the extendable whips but are longer, again, and do not flex as much. The only dual-band version which comes to mind is the ANLI AL-800. You might contact HAM RADIO OUTLET or AMATEUR ELECTRONIC SUPPLY to purchase any of these antennas.

Lance Lee, KD6DMR
lance_lee@smtp.esl.com

Date: Wed, 8 Jun 1994 17:28:42 GMT
From: ihnp4.ucsd.edu!swrinde!gatech!news-feed-1.peachnet.edu!news.duke.edu!eff!
news.kei.com!world!dts@network.ucsd.edu
Subject: Balloon
To: ham-ant@ucsd.edu

In article <Cr1wys.EC1@ncifcrf.gov> mack@ncifcrf.gov (Joe Mack) writes:
>In article <tony.69.770946350@mpce.mq.edu.au> tony@mpce.mq.edu.au (Tony Farrow)
writes:
>>>Subject: Balloons and Antennas
>>>From: cms.tech@cld9.com (Cms Tech)
>>>Date: Fri, 3 Jun 94 15:14:00 -0600
>>
>>>What factors should I consider in running an antenna way up in the air
>>>with a helium filled weather balloon? It seems like you could run the
>>>antenna 300-400 feet up and really bring in the signals. With a little
>>>anchoring, a light wind wouldn't be a problem.
>>
>>All you need to get such an arrangement in the air is a very light
>>cable. About this time last year a group of us from the Sydney
>>Radio Group did this from a mountain top in the Blue Mountains close
>>to Sydney, and got a lot contacts far and wide using 160 to 20 m.
>>It was great fun and generated a lot of interest on the bands.

>>
>>We used a very light steel ex-military field telephone cable which
>>served as both the tether line and the antenna. With one WX balloon
>>in a light breeze it worked OK.
>
> I've done this a few times and the operative word is "light". Even
>if the load is zero the angle of the line is determined by tan-1 (lift/drag)
>or something like that. Once you have a breeze not much is going to save you.
>We had a 5/8 lambda on 160. It was a lot of fun. A storm passed by several
>miles away and the static the line on the balloon picked up was enough to
>caused sparks to jump from the center conductor of the coax connector to
>the outer about every 5 secs. So make sure the cable is DC earthed. you
>could fry your front end.
>
> Joe Mack
> NA3T
> mack@ncifcrf.gov

Last year on Field Day KD1OU, WA1RHP, N1MNU, N1JIT and I had a lot of fun trying to get a workable antenna on 160 meters. We had planned to use a balloon, but it wasn't until 2am that the wind died down enough to even consider it. We tried an end-fed wire (against a LOT of 1 inch grounding braid) but had trouble with getting the length of the wire right (HINT: measure before you start letting the balloon up!).

Ultimately the solution that worked best was to hang a 160 meter inverted Vee dipole from the balloon. The feedline was RG8X, which was EASILY held up by the balloon (a 4 footer, I think), and the ropes from the ends of the antennas were tied to cars, I think. The feedpoint was about 80 feet up at best (it bobbed up and down with the wind). We cut the dipole to resonance, and used it without a tuner. Made some great contacts, though by the time we got it working well, most folks were asleep...

Dan

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Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-779-0439 Compuserve: 74176,1347

Date: 8 Jun 1994 19:54:13 GMT
From: lerc.nasa.gov!kira.cc.uakron.edu!malgudi.oar.net!news.ysu.edu!yfn.ysu.edu!
ap451@purdue.edu
Subject: GAP Titan vs MFJ-1798 vs R-7 (?)

To: ham-ant@ucsd.edu

Since the magazines are too afraid to do a real head-to-head comparison of the three no-radials all-band HF verticals, why don't we try to put something together here? (The get-a-beam and get-a-real-radial-vertical comments would be unwelcome; the purpose would be to compare these three space-compromise antennas.) Anyone who has had experience with 1) the GAP Titan, a brand new no-radial 80-10 offering, or its mini-radialized cousin, the GAP Challenger, 2) the finally-shipping MFJ 10-band Model 1798, or 3) the 40-10 meter no-radial trap vertical, the Cushcraft R-7, please forward your comments. I'll post a comprehensive summary.

Thanks.

Randy Padawer
WA4FJF
ap451@yfn.ysu.edu

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Randy Padawer, P.O. Box 1167, Knoxville, TN 37901-1167 U.S.of A
Internet: ap451@yfn.ysu.edu America Online: GwRepRandy
Telephone: (615) 637-7263 Ham Radio op: WA4FJF & a groovy guy.

Date: Wed, 8 Jun 94 02:36:09 GMT
From: ihnp4.ucsd.edu!usc!elroy.jpl.nasa.gov!ncar!uchinews!iitmax!
news@network.ucsd.edu
Subject: Newbie ponders J-Poles...
To: ham-ant@ucsd.edu

Okay, here's a REAL stupid question...

Are J-poles directional? I am in the process of building one, and it seems to me like there's a driven element and a director, yet the plans make no mention of any orientation considerations during mounting...

Arthur M. Mandelin, II ("The Artation") CMSMANDELIN@harpo.acc.iit.edu
"I am just a worthless liar / I am just an imbecile ..." -- Tool, "Sober" (Undertow)

Date: Wed, 8 Jun 1994 18:04:14 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!gatech!newsfeed.pitt.edu!gvls1!
rossi@network.ucsd.edu
Subject: Why high SWR on 30 meter GP?
To: ham-ant@ucsd.edu

This gets kind of complicated.

First a little history...

I have an old 14AVQ trap vertical. Over the years the antenna itself has been dis-assembled and I have used the base section as a support for making various single-band vertical groundplanes. I built one for 20 meters and later converted it to 15 meters. In both the 20 and 15 meter versions I simply made a new vertical element 1/4 wavelength long of telescoping aluminum tubing (cut for the center of the band - $234/f$) mounted in the 14AVQ base section. The 14AVQ base was mounted some 18 feet in the air on top of a wooden pole and 6-8 1/4 wave radial wires were extended out from the base to nearby trees, etc. The SWR was very low right where I cut the antenna for. No problems. It worked reasonably well for a groundplane...

Now, I wanted to get on 30 meters, so I thought... since 15 meters is not so hot lately, why not convert the 15 meter groundplane to 30 meters? So I added another piece of aluminum tubing to the vertical element to make it 23' 2" long ($234/10.1$ MHz) and made all of the radials about 23 1/2 feet long. This is exactly what I had done in the past for the 20 and 15 meter groundplanes - just scaled for 30 meters.

Well... It don't work :-(30 meter signals are much louder on this 30 meter groundplane compared to my 40 and 20 meter antennas but the SWR is infinite! I can see no change in the SWR at all from 9.5 - 11 MHz.

I am using the same coax that I had been using on 15 meters before I converted the groundplane to 30 meters and there it had nice low SWR. Coax is about 70-80 feet of 8214. I am going to try another piece of coax this weekend but I really don't think that is the problem.

I do have an idea however... Is this possible?

The 14AVQ base has a coil in it which is essentially an RF choke from the vertical element to ground to provide a DC ground path. Since the 14AVQ was never intended to be used at 10 MHz... is it possible that this coil is self-resonant somewhere around 10 MHz?

I figure that the coil has to be self-resonant *somewhere* and 10 MHz seems like a good place to put it for what was originally a 40-20-15-10 meter antenna. Anyone ever see anything like this? Besides bad coax (which I

highly doubt) this is the only thing that makes any sense. Any other ideas?

Pete Rossi - WA3NNA rossi@vfl.paramax.COM

Unisys Corporation - Government Systems Group
Valley Forge Engineering Center - Paoli, Pennsylvania

End of Ham-Ant Digest V94 #175
